OPEN MEETING

MEMORANDUM

Arizona Corporation Commission

DOCKETED

APR 1 9 2016

Utilities Division

DATE: April 19, 2016

THE COMMISSION

IN THE MATTER OF THE APPLICATION OF TUCSON ELECTRIC

DOCKETED BY

STANDARD AND TARIFF IMPLEMENTATION PLAN

DOCKET NO. E-01933A-15-0239

IN THE MATTER OF THE APPLICATION OF TUCSON ELECTRIC POWER COMPANY FOR THE ESTABLISHMENT OF JUST AND REASONABLE RATES AND CHARGES DESIGNED TO REALIZE A REASONABLE RATE OF RETURN ON THE FAIR VALUE OF THE PROPERTIES OF TUCSON ELECTRIC POWER COMPANY DEVOTED TO ITS OPERATIONS THROUGHOUT THE STATE OF ARIZONA AND FOR RELATED APPROVALS

DOCKET NO. E-01933A-15-0322

POWER COMPANY FOR APPROVAL OF ITS 2016 RENEWABLE ENERGY

On July 1, 2015, Tucson Electric Power Company ("TEP" or "Company") filed for Arizona Corporation Commission ("Commission") approval of its 2016 Renewable Energy Standard and Tariff ("REST") Implementation Plan. On September 16, 2015, TEP filed a supplement to its application reporting the results of its energy storage system solicitation and evaluation. On January 6, 2016, a Procedural Order was issued, setting the entire proposed 2016 TEP REST plan for hearing. The January 6, 2016 Procedural Order also stated that "If Staff files direct testimony in lieu of a Staff Report, Staff should include all information that it would otherwise include in a Staff Report when it prepares a Proposed Order." (Page 6, footnote 8) On March 11, 2016, Staff filed its Direct Testimony, which included a Memo as Exhibit 2 that reflected Staff's review and recommendations on issues other than the TEP-Owned Residential Solar program ("TORS"), the Residential Community Solar program ("RCS") and whether to consider the RCS and similar programs as distributed generation ("DG"). On April 6, 2016, a Procedural Order required Staff to "prepare a Staff Report and Order for Commission consideration on the un-contested portion of the TEP's 2016 REST Plan (i.e. the non-TORS and non-RCS programs)." (Page 4, lines 12-14). This Memo is Staff's filing in response to this Procedural Order and reflects the same Staff recommendations that were contained in Exhibit 2 filed with Staff's Direct Testimony on March 11, 2016.

TEP's initial filing requested approval of various REST plan components, including a budget, customer class caps, various program details, approval of energy storage projects, waiver of the 2016 residential DG REST requirement, and compliance matters.



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2016 APR 19 P 2: 43

AZ CORP COMMISSION DOCKET CONTROL

RE:

TO:

FROM:

TEP's Five Year Projection of Energy, Capacity, and Costs

The table below shows TEP's forecast for energy and costs for its annual REST plans from 2016 through 2020.

TEP Energy, C	apacity, and Co	st Forecast			
	2016	2017	2018	2019	2020
Forecast					
Retail Sales					
MWh	9,063,742	9,113,176	9.189,984	9.381,001	9.846,004
% Renewable					
Energy					
Required	6.0%	7.0%	8.0%	9.0%	10.0%
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Requirement					
MWh	163,147	191,377	220,560	253,287	295,380
RES DG					
Requirement		1.			
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Total	\$47,836,529	\$47,790,347	\$45,638,929	\$43,868,828	\$41,224,021
Program Cost					

TEP REST Experience Under 2015 REST Plan

The Commission-approved implementation plan for 2015 contemplated total spending of \$40,118,385 and total recoveries through the REST surcharge of \$33,291,969.

Regarding installations and reservations, the table below summarizes installations and reservations for installations through June 30, 2015 by TEP.

Residential	Photovoltaics		Solar	Hot Water
	Number of Systems	kW (kWh)	Number of Systems	kWh
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Reservations	2,293	12,590 (23,921,000)	NA	NA

Commercial	Phot	ovoltaics	Solar Hot Water		
	Number of Systems	kW (kWh)	Number of Systems	kW	
2015 Installations	36	7,150 (594,709)	NA	NA	
Reservations	165	36,450 (69,255,000)	NA	NA	

Systems That Do Not Take a Utility Incentive

The following table shows the number, kW, and kWh of systems that have been installed in TEP's service territory that have not taken an incentive from TEP and thus TEP has not used the associated renewable energy credits ("RECs") to achieve compliance under the REST rules.

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2014	1,875	13,461	21,743,879
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Non-Residential			
2012	3	179	321,894
2013	8	5,011	9,020,250
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Leased Versus Non-Leased Systems

TEP indicates that a significant majority of residential systems are leased in 2014 and into August 2015 (2701 leased systems versus 1008 non-leased systems). TEP indicates that all 37 non-residential systems are non-leased in 2014 and all 39 non-residential systems so far in 2015 are non-leased.

Bright Tucson Solar Buildout Plan

In recent years the Commission has approved continuation of TEP's buildout program at a rate of up to \$28 million annually. However, TEP has indicated that it will no longer seek approval of Bright Tucson Solar Buildout Plan funding through the REST plan. Instead TEP will invest in renewable energy projects and seek recovery of related costs via traditional methods, such as in a general rate proceeding. Thus, TEP's buildout plan related costs the Company is seeking to recover through the REST budget are costs related to projects from past years' REST plans that are not yet being recovered through base rates.

Line Item	2016	2017	2018	2019
Carrying	\$4,085,866	\$531,329	\$475,422	\$310,061
Costs				
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Depreciation				
Property Tax	\$392,960			\$65,013
Expense				
Operations	\$498,667	\$69,525	\$71,611	\$73,759
and				
Maintenance				
Total	\$9,366,025	\$1,200,854	\$1,147,033	\$1,048,833

Energy Storage Solicitation

In TEP's 2015 REST plan filing with the Commission on July 1, 2014, TEP sought Commission guidance as to how costs for a potential energy storage project could be recovered, in anticipation of an upcoming solicitation TEP would hold for a 10 MW energy storage system ("ESS"). In Decision Number 74884, the Commission indicated that its preference at the time was for TEP to recover such costs through TEP's Purchased Power and Fuel Adjustment Clause ("PPFAC"). TEP's proposed 2016 REST plan filing indicated that TEP would update it with information on the ESS solicitation when it was completed. TEP filed this update in its September 16, 2015, supplement to its proposed 2016 REST plan.

TEP's supplemental filing indicates that TEP selected two 10 MW storage projects. TEP indicated that the responses to the solicitation exceeded its expectations and that it would be able to do the two 10 MW projects for less cost than it expected to do the one 10 MW project it discussed in its 2015 REST plan filing. The storage projects would involve two lithium battery variations, with one including a 2 MW solar facility. TEP would contract with outside companies for the two storage facilities for ten years of service from the facilities. TEP would pay fees to the two companies totaling \$1,520,000 annually, or a total of \$15,200,000 over the ten year life of the agreements with the outside companies.

TEP has indicated that the benefits of the project include providing frequency response at pre-determined set points, voltage and VAR support, ramp rate control, and energy storage as required. TEP has also cited that the storage projects will help TEP avoid possible North American Electric Reliability Corporation ("NERC") penalties. TEP has indicated in discussions with Staff that pursuit of storage projects such as these is necessitated by the increasing deployment of renewable energy facilities on its grid and the concomitant grid support needs. Of note, TEP also indicated to Staff that different renewable energy technologies require different type(s) of grid support, so, for example, the grid support requirements of wind would be different than the grid support requirements of solar.

TEP's agreements with the two proposed storage projects include protection for ratepayers by requiring the storage facilities to demonstrate on a quarterly basis that their facilities can perform

up to the requirements of their contracts with TEP. Regarding the 2 MW solar facility, TEP would own the associated RECs and be able to count them toward compliance.

Regarding cost recovery, Staff does not see a reason to change the guidance that was provided to TEP in Decision Number 74884 regarding the potential recovery of ESS related costs through the PPFAC. Staff recommends that TEP file a revised PPFAC Plan of Administration consistent with the Decision in this case, in Docket Control, within 30 days of the effective date of the Decision. The Plan of Administration should list the appropriate FERC account(s) in which the various storage-related costs would be included.

Energy storage is often cited as one of the key expected developments in the electric utility industry in the coming years and deployment of these facilities on TEP's electric grid will provide TEP with valuable experience in understanding the benefits and challenges of having storage assets within its electric supply portfolio. Staff recommends approval, as a pilot program, of the proposed energy storage facilities and recovery of prudently incurred costs through the PPFAC.

Residential DG Waiver Request

TEP is requesting in its proposed 2016 REST plan to be granted a prospective annual waiver of the 2016 residential DG REST incremental requirement. TEP has indicated that it projects that it will not have enough RECs to demonstrate compliance with its residential DG requirement in 2016 given that it is not counting toward REST compliance any residential DG installations that it does not give an incentive to. In support of TEP's request TEP cited the following information in communications with Staff:

- In 2014, TEP installed or reserved 20.83 MW of non-incentivized residential solar PV of capacity.
- Through August 28, 2015, TEP has installed or reserved 21.042 MW of non-incentivized residential solar PV of capacity.
- Cumulatively, this additional 41.872 MW of residential solar capacity will produce, on average, an additional 78,510,000 kWh annually (based on 1,875 kWh per kW). Although TEP does not own title to these REC's, nor can TEP claim these kWh or REC's for RPS compliance purposes, they represent more than double the 62,947,000 kWh the Company retired for compliance in 2014. Combined these values represent more than 1.5 percent of TEP's annual retail sales the equivalent of the Company's projected compliance requirement for the year 2020.
- TEP indicated that as of the end of 2014, it had 62,947 MWh of residential DG RECs and that it expects the 2016 residential DG compliance requirement to be approximately 81,600 MWh of residential DG RECs.

If the 600 installations, with an average system size of 6 kW and generating 1,800 kWh/kW, the total production of those installations for an entire year would be a little over 6,000 MWh. Thus the RECs from this program would not nearly fill the roughly 20,000 MWh gap TEP has identified.

In essence, TEP is citing a high level of non-incentived market activity in its service territory in the past and present to justify the granting of a waiver. During the Commission's Track and Record proceeding and subsequent REST rulemaking dockets, market activity was a commonly cited possible way for a utility to demonstrate that the granting of a waiver is warranted. From the information provided by TEP, Staff believes that it is highly likely TEP will need a waiver of the 2016 increment of the residential DG portion of its REST requirement and that the high level of market activity in the past and present is an acceptable way to demonstrate the reasonableness of granting such a waiver. TEP has indicated that RECs it receives from the 600 installations under the initial pilot phase of the TORS program will not result in it achieving compliance in 2016. Further, given the delays in this proceeding, it appears unlikely that TEP would receive any RECs in 2016 from its proposed community solar program if it is ultimately is approved by the This filing by TEP represents the first waiver request by TEP since the Commission's track and record proceeding concluded. Unlike typical REST plan filings which are acted on by the Commission late in the previous calendar year or slightly into the year the plan is applicable to, this REST plan is under consideration in a hearing process where TEP will not have an approved REST plan for 2016 until well into 2016. Staff believes given the circumstances in this case that an annual waiver of the 2016 increment of the residential DG compliance requirement under the REST rules is warranted and Staff recommends approval of such a waiver. Under such an annual waiver, it would be valid for the calendar year 2016.

Given the high level of non-incentivized market activity in TEP's service territory in recent years and the lack of new RECs TEP is receiving for DG installations, Staff believes that there is a very high likelihood that TEP will need an additional waiver for the calendar year 2017. Such a waiver would include both the 2016 residential DG increment and the 2017 residential DG increment. Staff therefore recommends that a waiver also be granted to TEP for the 2017 calendar year for both the 2016 residential DG increment and the 2017 residential DG increment.

2016 REST Budget Proposal

The TEP and Staff REST plan budget proposal will be discussed in the remainder of this document.

2014 Funds Carried Forward to 2016 REST Budget

TEP's filing reflects the carryforward of \$8,809,321 in unspent funds from TEP's 2014 REST budget. The table below accounts for what line items of TEP's 2014 REST budget those funds came from.

2014 Tariff Revenue	\$390,856
Lower Cost Purchased Renewable Energy	\$8,474,468

Customer Sited Distributed Renewable Energy	\$254,933
Labor and Administration	\$83,612
Metering	-\$393,981
Other Budget Items	-\$567
Total Unspent 2014 REST funds	\$8,809,321

The TEP and Staff REST budget proposal discussed herein reflects this carryforward of unspent 2014 REST funds which reduce the amount of money required to be recovered through the 2016 REST surcharge. This treatment is consistent with how the Commission has treated funds carried forward in the past.

Proposed TEP and Staff Budget

Staff has reviewed the budget proposal contained in TEP's proposed 2015 REST plan and agrees with TEP's proposed budget. The table below summarizes the budget being proposed by TEP and Staff.

Budget Components	2015 Approved Budget	2016 TEP and Staff Proposal
Purchased Renewable Energy		
Above market cost of conventional	\$22,971,774	\$38,002,919
generation		
TEP Owned	\$8,022,530	\$9,366,025
Subtotal	\$30,994,304	\$47,368,944
Customer Sited Distributed Renewable		
Energy		
Non-Residential PBI On-Going	\$7,214,196	\$7,192,720
Commitments		
Meter Reading	\$35,363	\$35,363
Ü		
Customer Education and Outreach	\$100,000	\$100,000
Subtotal	\$7,349,559	\$7,328,083
Internal and Contractor Training		
Subtotal	\$85,000	\$85,000
Information Systems		
Subtotal	\$100,000	\$75,000
Metering		
Subtotal	\$501,680	\$697,975
Labor and Administration		
Internal Labor	\$468,442	\$556,944
External Labor	\$302,401	\$216,903
Materials, Fees, Supplies	\$60,000	\$60,000
AZ Solar Website	\$4,000	\$4,000
Subtotal	\$834,843	\$837,847
Research and Development		
Renewable Integration and Operations	\$38,000	\$38,000
Study		
Solar and Wind Forecast Integration	\$100,000	\$100,000
Portal		
Solar Test Yard	\$50,000	\$50,000
Field and Lab Degradation Analysis	\$50,000	\$50,000
Dues and Fees	\$15,000	\$15,000
Subtotal	\$253,000	\$253,000
Total Spending	\$40,118,386	\$56,645,849
Carryover of Previous Year's Funds	-\$6,826,417	-\$8,809,321
Total Amount for Recovery	\$33,291,969	\$47,836,529

Recovery of Funds through 2016 REST Charge

TEP's proposed caps and per kWh charge are designed to recover TEP's proposed spending and recovery levels in 2016 and Staff's proposed caps and per kWh charge are designed to recover TEP and Staff's proposed budget of \$56.6 million and recovery level of \$47.8 million.

The table below shows the proposed surcharge per kWh for the TEP and Staff options as well as the proposed caps under each option, in comparison to what is currently in effect for 2015.

	2015 Approved	2016 TEP Proposal	2016 Staff Proposal
REST Charge	\$0.008	\$0.013	\$0.013
(per kWh)			
Class Caps			
Residential	\$3.83	\$4.56	\$4.76

Small General Service (Small	\$100.00	\$150.00	\$130.00
Commercial)			
Large General Service (Large	\$1,015.00	\$1,500.00	\$1,300.00
Commercial)			
Industrial and Mining	\$8,000.00	\$12,000.00	\$15,000.00
Lighting	\$100.00	\$150.00	\$130.00

Staff's proposal contains the same per kWh REST surcharge as TEP's proposal does, but adjusts the customer class caps differently than TEP. Staff's proposed caps reduce the impact on the small general service and large general service customers, reflecting that these two customer classes contribute a much higher percentage of REST revenue than their share of TEP's MWH sales and even with Staff's proposal would continue to do so.

The cost recovery by customer class for the TEP and Staff options for the 2016 REST plan are shown in the table below. For comparison purposes, the table below also shows the projected MWH sales by customer class for 2016.

	2016 Projected Sales (MWH)	2016 TEP Proposal	2016 Staff Proposal
Residential	3,690,752	\$18,677,315	\$19,361,633
	(40.7%)	(39.1%)	(40.5%)
Small General	2,166,759	\$16,265,080	\$15,397,114
Service	(23.9%)	(34.0%)	(32.2%)
Large General	1,149,502	\$8,646,389	\$7,888,677
Service	(12.7%)	(18.1%)	(16.5%)
Industrial and	2,024,188	\$3,813,236	\$4,766,545
Mining	(22.3%)	(8.0%)	(10.0%)
Lighting	32,541	\$423,386	\$418,891
	(0.4%)	(0.9%)	(0.9%)
Total	9,063,742	\$47,825,407	\$47,832,860

The table below shows the average REST charge by customer class as well as the percentage of customers at the cap for each customer class.

	2016 TEP Proposal	2016 Staff Proposal	
Residential - Average Bill	\$4.02	\$4.17	
Small Commercial - Average Bill	\$32.06	\$30.32	
Large Commercial - Average Bill	\$1,200.02	\$1,092.76	
Industrial and Mining - Average Bill	\$12,000	\$15,000	
Lighting - Average Bill	\$19.05	\$18.85	
Residential – Percent at Cap	75.1%	73.5%	
Small Commercial – Percent at Cap	8.2%	9.3%	
Large Commercial –	50.6%	57.0%	

Percent at Cap		
Industrial and Mining –	100.0%	100.0%
Percent at Cap		
Lighting – Percent at	0.7%	1.3%
Cap		

Staff recommends approval of the Staff proposal.

Compliance Issues

Having reviewed the Company's compliance report filed with the Commission in April 2015, the proposed REST plan filed in July 2015, and other applicable information, Staff concludes that TEP has not used any RECs not owned by the utility to comply with the Commission's REST rules in 2014.

Per Arizona Administrative Code ("A.A.C.") R14-2-1812, UNS is required to file an annual compliance report. Staff recommends that, TEP file its annual REST compliance reports in a docket to be opened by Staff.

Staff Recommendations

- 1. Staff recommends that the Commission approve the Staff budget option for the 2016 REST plan, reflecting a REST surcharge of \$0.01300 per kWh, and related caps of \$4.76 for the residential class, \$130.00 for the small general service class, \$1,300.00 for the large general service class, \$15,000.00 for the industrial and mining class, and \$130.00 for the lighting class. This includes total spending of \$56,645,849 and a total amount to be recovered through the REST surcharge of \$47,836,529.
- 2. Staff further recommends approval, as a pilot program, of the proposed energy storage facilities and recovery of prudently incurred costs through the Purchased Power and Fuel Adjustment Clause.
- 3. Staff further recommends that Tucson Electric Power file a revised Purchased Power and Fuel Adjustment Clause Plan of Administration consistent with the Decision in this case, in Docket Control, within 30 days of the effective date of the Decision. The Plan of Administration should list the appropriate Federal Energy Regulatory Commission account(s) in which the various storage-related costs would be included.
- 4. Staff further recommends approval of the waiver requested by Tucson Electric Power for the 2016 increment for the residential DG requirement in the REST rules.
- 5. Staff further recommends that Tucson Electric Power file its annual REST compliance reports in a docket to be opened by Staff.

- 6. Staff further recommends that Tucson Electric Power file the REST-TS1, consistent with the Decision in this case, within 15 days of the effective date of the Decision.
- 7. Staff further recommends that a waiver also be granted to TEP for the 2017 calendar year for both the 2016 residential DG increment and the 2017 residential DG increment.

Thomas M. Broderick

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Director

Utilities Division

TMB:RGG:nr\RRM

ORIGINATOR: Robert Gray

1	BEFORE THE ARIZONA CO	RPORATION COMMISSION
2	DOUG LITTLE Chairman	
3	BOB STUMP	
4	Commissioner BOB BURNS	
5	Commissioner TOM FORESE	
_	Commissioner	
6	ANDY TOBIN Commissioner	
7		
8	IN THE MATTER OF THE APPLICATION) OF TUCSON ELECTRIC POWER	DOCKET NO. E-01933A-15-0239
9	COMPANY FOR APPROVAL OF ITS 2016	
10	RENEWABLE ENERGY STANDARD AND TARIFF IMPLEMENTATION PLAN.	
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12	OF TUCSON ELECTRIC POWER	DOCKET NO. E-01933A-15-0322
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16	COMPANY DEVOTED TO ITS OPERATIONS THROUGHOUT THE	<u>ORDER</u>
17	STATE OF ARIZONA AND FOR	
18	RELATED APPROVALS	
19		
	Open Meeting May 3 and 4, 2016	
20	Phoenix, Arizona	
21	BY THE COMMISSION:	
22	FINDINGS	OF FACT
23	Tucson Electric Power Company ("TEP" or "Company") is engaged in providing
24	electric service within portions of Arizona, pursuan	t to authority granted by the Arizona Corporation
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27	Standard and Tariff ("REST") Implementation Plan.	On September 16, 2015, TEP filed a supplement
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Decision No.	
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Energy Storage Solicitation

- In TEP's 2015 REST plan filing with the Commission on July 1, 2014, TEP sought Commission guidance as to how costs for a potential energy storage project could be recovered, in anticipation of an upcoming solicitation TEP would hold for a 10 MW energy storage system ("ESS"). In Decision Number 74884, the Commission indicated that its preference at the time was for TEP to recover such costs through TEP's Purchased Power and Fuel Adjustment Clause ("PPFAC"). TEP's proposed 2016 REST plan filing indicated that TEP would update it with information on the ESS solicitation when it was completed. TEP filed this update in its September 16, 2015 supplement to its proposed 2016 REST plan.
- 13. TEP's supplemental filing indicates that TEP selected two 10 MW storage projects. TEP indicated that the responses to the solicitation exceeded its expectations and that it would be able to do the two 10 MW projects for less cost than it expected to do the one 10 MW project it discussed in its 2015 REST plan filing. The storage projects would involve two lithium battery variations, with one including a 2 MW solar facility. TEP would contract with outside companies for the two storage facilities for ten years of service from the facilities. TEP would pay fees to the two companies totaling \$1,520,000 annually, or a total of \$15,200,000 over the ten year life of the agreements with the outside companies.
- 14. TEP has indicated that the benefits of the project include providing frequency response at pre-determined set points, voltage and VAR support, ramp rate control, and energy storage as required. TEP has also cited that the storage projects will help TEP avoid possible North American Electric Reliability Corporation ("NERC") penalties. TEP has indicated in discussions with Staff that pursuit of storage projects such as these is necessitated by the increasing deployment of renewable energy facilities on its grid and the concomitant grid support needs. Of note, TEP also indicated to Staff that different renewable energy technologies require different type(s) of grid support, so, for example, the grid support requirements of wind would be different than the grid support requirements of solar.
- 15. TEP's agreements with the two proposed storage projects include protection for ratepayers by requiring the storage facilities to demonstrate on a quarterly basis that their facilities can

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perform up to the requirements of their contracts with TEP. Regarding the 2 MW solar facility, TEP would own the associated RECs and be able to count them toward compliance.

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Regarding cost recovery, Staff does not see a reason to change the guidance that was provided to TEP in Decision Number 74884, regarding the potential recovery of ESS related costs through the PPFAC. Staff recommends that TEP file a revised PPFAC Plan of Administration consistent with the Decision in this case, in Docket Control, within 30 days of the effective date of the Decision. The Plan of Administration should list the appropriate FERC account(s) in which the various storage-related costs would be included.

17. Energy storage is often cited as one of the key expected developments in the electric utility industry in the coming years and deployment of these facilities on TEP's electric grid will provide TEP with valuable experience in understanding the benefits and challenges of having storage assets within its electric supply portfolio. Staff recommends approval, as a pilot program, of the proposed energy storage facilities and recovery of prudently incurred costs through the PPFAC.

Residential DG Waiver Request

- 18. TEP is requesting in its proposed 2016 REST plan to be granted a prospective annual waiver of the 2016 residential DG REST incremental requirement. TEP has indicated that it projects that it will not have enough RECs to demonstrate compliance with its residential DG requirement in 2016 given that it is not counting toward REST compliance any residential DG installations that it does not give an incentive to. In support of TEP's request TEP cited the following information in communications with Staff:
 - In 2014, TEP installed or reserved 20.83 MW of non-incentivized residential solar PV a. of capacity.
 - Through August 28, 2015, TEP has installed or reserved 21.042 MW of non-incentivized b. residential solar PV of capacity.
 - Cumulatively, this additional 41.872 MW of residential solar capacity will produce, on c. average, an additional 78,510,000 kWh annually (based on 1,875 kWh per kW). Although TEP does not own title to these REC's, nor can TEP claim these kWh or REC's for RPS compliance purposes, they represent more than double the 62,947,000

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kWh the Company retired for compliance in 2014. Combined these values represent more than 1.5 percent of TEP's annual retail sales – the equivalent of the Company's projected compliance requirement for the year 2020.

- d. TEP indicated that as of the end of 2014 it had 62,947 MWh of residential DG RECs and that it expects the 2016 residential DG compliance requirement to be approximately 81,600 MWh of residential DG RECs.
- 19. If the 600 installations, with an average system size of 6 kW and generating 1,800 kWh/kW, the total production of those installations for an entire year would be a little over 6,000 MWh. Thus the RECs from this program would not nearly fill the roughly 20,000 MWh gap TEP has identified.
- 20. In essence TEP is citing a high level of non-incentived market activity in its service territory in the past and present to justify the granting of a waiver. During the Commission's Track and Record proceeding and subsequent REST rulemaking dockets, market activity was a commonly cited possible way for a utility to demonstrate that the granting of a waiver is warranted. From the information provided by TEP, Staff believes that it is highly likely TEP will need a waiver of the 2016 increment of the residential DG portion of its REST requirement and that the high level of market activity in the past and present is an acceptable way to demonstrate the reasonableness of granting such a waiver. TEP has indicated that RECs it receives from the 600 installations under the initial pilot phase of the TORS program will not result in it achieving compliance in 2016. Further, given the delays in this proceeding, it appears unlikely that TEP would receive any RECs in 2016 from its proposed community solar program if it is ultimately is approved by the Commission.
- 21. This filing by TEP represents the first waiver request by TEP since the Commission's track and record proceeding concluded. Unlike typical REST plan filings which are acted on by the Commission late in the previous calendar year or slightly into the year the plan is applicable to, this REST plan is under consideration in a hearing process where TEP will not have an approved REST plan for 2016 until well into 2016. Staff believes given the circumstances in this case that an annual waiver of the 2016 increment of the residential DG compliance requirement under the REST rules is warranted and Staff recommends approval of such a waiver. Under such an annual waiver, it would be valid for the calendar year 2016.

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22. Given the high level of non-incentivized market activity in TEP's service territory in recent years and the lack of new RECs TEP is receiving for DG installations, Staff believes that there is a very high likelihood that TEP will need an additional waiver for the calendar year 2017. Such a waiver would include both the 2016 residential DG increment and the 2017 residential DG increment. Staff therefore recommends that a waiver also be granted to TEP for the 2017 calendar year for both the 2016 residential DG increment and the 2017 residential DG increment.

2016 REST Budget Proposal

23. The TEP and Staff REST plan budget proposal will be discussed in the remainder of this document.

2014 Funds Carried Forward to 2016 REST Budget

24. TEP's filing reflects the carryforward of \$8,809,321 in unspent funds from TEP's 2014 REST budget. The table below accounts for what line items of TEP's 2014 REST budget those funds came from.

2014 Tariff Revenue	\$390,856
Lower Cost Purchased Renewable Energy	\$8,474,468
Customer Sited Distributed Renewable Energy	\$254,933
Labor and Administration	\$83,612
Metering	-\$393,981
Other Budget Items	-\$567
Total Unspent 2014 REST funds	\$8,809,321

25. The TEP and Staff REST budget proposal discussed herein reflects this carryforward of unspent 2014 REST funds which reduce the amount of money required to be recovered through the 2016 REST surcharge. This treatment is consistent with how the Commission has treated funds carried forward in the past.

Proposed TEP and Staff Budget

26. Staff has reviewed the budget proposal contained in TEP's proposed 2015 REST plan and agrees with TEP's proposed budget. The table below summarizes the budget being proposed by TEP and Staff.

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Budget Components	2015 Approved Budget	2016 TEP and Staff Proposal
Purchased Renewable Energy		
Above market cost of conventional	\$22,971,774	\$38,002,919
generation		
TEP Owned	\$8,022,530	\$9,366,025
Subtotal	\$30,994,304	\$47,368,944
Customer Sited Distributed Renewable		
Energy		•
Non-Residential PBI On-Going	\$7,214,196	\$7,192,720
Commitments		
Meter Reading	\$35,363	\$35,363
Customer Education and Outreach	\$100,000	\$100,000
Subtotal	\$7,349,559	\$7,328,083
Internal and Contractor Training		
Subtotal	\$85,000	\$85,000
Information Systems		
Subtotal	\$100,000	\$75,000
Metering		
Subtotal	\$501,680	\$697,975
Labor and Administration		
Internal Labor	\$468,442	\$556,944
External Labor	\$302,401	\$216,903
Materials, Fees, Supplies	\$60,000	\$60,000
AZ Solar Website	\$4,000	\$4,000
Subtotal	\$834,843	\$837,847
Research and Development		
Renewable Integration and Operations	\$38,000	\$38,000
Study		
Solar and Wind Forecast Integration	\$100,000	\$100,000
Portal		
Solar Test Yard	\$50,000	\$50,000
Field and Lab Degradation Analysis	\$50,000	\$50,000
Dues and Fees	\$15,000	\$15,000
Subtotal	\$253,000	\$253,000
Total Spending	\$40,118,386	\$56,645,849
Carryover of Previous Year's Funds	-\$6,826,417	-\$8,809,321
Total Amount for Recovery	<i>\$33,291,969</i>	\$47,836,529

Recovery of Funds through 2016 REST Charge

- 27. TEP's proposed caps and per kWh charge are designed to recover TEP's proposed spending and recovery levels in 2016 and Staff's proposed caps and per kWh charge are designed to recover TEP and Staff's proposed budget of \$56.6 million and recovery level of \$47.8 million.
- 28. The table below shows the proposed surcharge per kWh for the TEP and Staff options as well as the proposed caps under each option, in comparison to what is currently in effect for 2015.

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	2015 Approved	2016 TEP Proposal	2016 Staff Proposal
REST Charge (per kWh)	\$0.008	\$0.013	\$0.013
Class Caps			
Residential	\$3.83	\$4.56	\$4.76
Small General Service (Small Commercial)	\$100.00	\$150.00	\$130.00
Large General Service (Large Commercial)	\$1,015.00	\$1,500.00	\$1,300.00
Industrial and Mining	\$8,000.00	\$12,000.00	\$15,000.00
Lighting	\$100.00	\$150.00	\$130.00

29. Staff's proposal contains the same per kWh REST surcharge as TEP's proposal does, but adjusts the customer class caps differently than TEP did. Staff's proposed caps reduce the impact on the small general service and large general service customers, reflecting that these two customer classes contribute a much higher percentage of REST revenue than their share of TEP's MWH sales and even with Staff's proposal would continue to do so.

30. The cost recovery by customer class for the TEP and Staff options for the 2016 REST plan are shown in the table below. For comparison purposes, the table below also shows the projected MWH sales by customer class for 2016.

	2016 Projected Sales (MWH)	2016 TEP Proposal	2016 Staff Proposal
Residential	3,690,752	\$18,677,315	\$19,361,633
	(40.7%)	(39.1%)	(40.5%)
Small General	2,166,759	\$16,265,080	\$15,397,114
Service	(23.9%)	(34.0%)	(32.2%)
Large General	1,149,502	\$8,646,389	\$7,888,677
Service	(12.7%)	(18.1%)	(16.5%)
Industrial and	2,024,188	\$3,813,236	\$4,766,545
Mining	(22.3%)	(8.0%)	(10.0%)
Lighting	32,541	\$423,386	\$418,891
	(0.4%)	(0.9%)	(0.9%)
Total	9,063,742	\$47,825,407	\$47,832,860

31. The table below shows the average REST charge by customer class as well as the percentage of customers at the cap for each customer class.

	2016 TEP Proposal	2016 Staff Proposal	
Residential - Average Bill	\$4.02	\$4.17	
Small Commercial - Average Bill	\$32.06	\$30.32	
Large Commercial - Average Bill	\$1,200.02	\$1,092.76	

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Industrial and Mining - Average Bill	\$12,000	\$15,000	
Lighting - Average Bill	\$19.05	\$18.85	
Residential - Percent at	75.1%	73.5%	
Cap	•		
Small Commercial –	8.2%	9.3%	
Percent at Cap			
Large Commercial –	50.6%	57.0%	
Percent at Cap			
Industrial and Mining –	100.0%	100.0%	
Percent at Cap			
Lighting - Percent at	0.7%	1.3%	
Cap			

32. Staff recommends approval of the Staff proposal.

Compliance Issues

- 33. Having reviewed the Company's compliance report filed with the Commission in April 2015, the proposed REST plan filed in July 2015, and other applicable information, Staff concludes that TEP has not used any RECs not owned by the utility to comply with the Commission's REST rules in 2014.
- 34. Per Arizona Administrative Code ("A.A.C.") R14-2-1812, UNS is required to file an annual compliance report. Staff recommends that, TEP file its annual REST compliance reports in a docket to be opened by Staff.

Staff Recommendations

- 35. Staff has recommended that the Commission approve the Staff budget option for the 2016 REST plan, reflecting a REST surcharge of \$0.01300 per kWh, and related caps of \$4.76 for the residential class, \$130.00 for the small general service class, \$1,300.00 for the large general service class, \$15,000.00 for the industrial and mining class, and \$130.00 for the lighting class. This includes total spending of \$56,645,849 and a total amount to be recovered through the REST surcharge of \$47,836,529.
- 36. Staff has further recommended approval, as a pilot program, of the proposed energy storage facilities and recovery of prudently incurred costs through the Purchased Power and Fuel Adjustment Clause.
- 37. Staff has further recommended that Tucson Electric Power file a revised Purchased Power and Fuel Adjustment Clause Plan of Administration consistent with the Decision in this case, in

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Docket Control, within 30 days of the effective date of the Decision. The Plan of Administration should list the appropriate Federal Energy Regulatory Commission account(s) in which the various storagerelated costs would be included.

- 38. Staff has further recommended approval of the waiver requested by Tucson Electric Power for the 2016 increment for the residential DG requirement in the REST rules.
- 39. Staff has further recommended that Tucson Electric Power file its annual REST compliance reports in a docket to be opened by Staff.
- 40. Staff has further recommended that Tucson Electric Power file the REST-TS1, consistent with the Decision in this case, within 15 days of the effective date of the Decision.
- 41. Staff further recommends that a waiver also be granted to TEP for the 2017 calendar year for both the 2016 residential DG increment and the 2017 residential DG increment.

CONCLUSIONS OF LAW

- Tucson Electric Power Company is an Arizona public service corporation within the 1. meaning of Article XV, Section 2 of the Arizona Constitution.
- 2. The Commission has jurisdiction over Tucson Electric Power Company and over the subject matter of the application.
- 3. The Commission, having reviewed the application and Staff's Memorandum dated April 19, 2016, concludes that it is in the public interest to approve Tucson Electric Power Company's 2016 Renewable Energy Standard and Tariff Implementation Plan, as discussed herein.

ORDER

IT IS THEREFORE ORDERED that the Staff budget option for the 2016 REST plan, reflecting a REST surcharge of \$0.01300 per kWh, and related caps of \$4.76 for the residential class, \$130.00 for the small general service class, \$1,300.00 for the large general service class, \$15,000.00 for the industrial and mining class, and \$130.00 for the lighting class, be and hereby is approved. This includes total spending of \$56,645,849 and a total amount to be recovered through the REST surcharge of \$47,836,529.

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IT IS FURTHER ORDERED that the proposed energy storage facilities be and hereby is approved including recovery of prudently incurred costs through the Purchased Power and Fuel Adjustment Clause. IT IS FURTHER ORDERED that Tucson Electric Power Company file a revised Purchased Power and Fuel Adjustment Clause Plan of Administration consistent with the Decision in this case, in Docket Control, within 30 days of the effective date of the Decision. The Plan of Administration should list the appropriate Federal Energy Regulatory Commission account(s) in which the various storage-related costs would be included. IT IS FURTHER ORDERED that the waiver requested by Tucson Electric Power Company for the 2016 increment for the residential DG requirement in the REST rules be and hereby is approved. IT IS FURTHER ORDERED that a waiver be granted to TEP for the 2017 calendar year for both the 2016 residential DG increment and the 2017 residential DG increment. IT IS FURTHER ORDERED that Tucson Electric Power Company file its annual REST compliance reports in a docket to be opened by Staff.

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1	IT IS FURTHER ORDERED that Tucson Electric Power Company file the REST-TS			
2	NI CONTRACTOR OF THE CONTRACTO	consistent with the Decision in this case, within 15 days of the effective date of the Decision.		
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4	BY THE ORDER O	F THE ARIZONA CORPORATION COMMISSION		
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6	CHAIRMAN	COMMISSIONER		
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9	COMMISSIONER	COMMISSIONER COMMISSIONER		
10		IN WITNESS WHEREOF, I, JODI JERICH, Executive		
11		Director of the Arizona Corporation Commission have		
12 13		hereunto, set my hand and caused the official seal of this Commission to be affixed at the Capitol, in the City of Phoenix, this, 2016.		
13		this, 2016.		
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16		JODI JERICH		
17		EXECUTIVE DIRECTOR		
18	DISSENT:			
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1	SERVICE LIST FOR: TUCSON ELECTRIC F	OOWED COMPANY	
1	DOCKET NO. E-01933A-15-0239 and E-01933A-15-0322		
2	De Gradi ivol d'organi is odo, and d'organi	511 13 03 2 2	
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a -		Chief Administrative Law Judge, Hearing
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